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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,166	08/01/2003	Osamu Ueda	B588-637 (25815.653)	4594

26272 7590 12/09/2009  
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NEW YORK, NY 10036

EXAMINER
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HENN, TIMOTHY J

ART UNIT	PAPER NUMBER
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2622

MAIL DATE	DELIVERY MODE
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12/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/633,166	<b>Applicant(s)</b> UEDA ET AL.	
	<b>Examiner</b> Timothy J. Henn	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 14 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14 and 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 14 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakano et al. (US 2004/0046884) in view of Yamamoto (JP 2000-188716).

#### **[claim 14]**

4. Regarding claim 14, Nakano discloses an imaging apparatus comprising: an image pickup element having an imaging area in which a plurality of light receiving elements are two-dimensionally arranged (Figure 7, Item 3; Figure 2); a zoom operation unit for a user to operate expansion or reduction of an image (Figure 7, Item 18; Paragraphs 0066-0067); and a controller (Figure 7, Item 11; Paragraph 0030) that controls to mix a first number of pixel signals in the image pickup element, which is output from the plurality of light receiving elements in a first area of the imaging area, in a case that a first magnification is set by the zoom operation unit (Figure 9; Area A; 4-pixel mixing; Paragraph 0074 and 0077), and to mix a second number of pixel signals in

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the image pickup element, which is output from the plurality of light receiving elements in a second area, which is smaller than the first area, of the imaging area, in a case that a second magnification, which is larger than the first magnification, is set by the zoom operation unit, wherein the second number is smaller than the first number (Figure 9, Area B; 3-pixel mixing; Paragraphs 0074 and 0077). However, Nakano does not disclose first and second shutter speeds as claimed.

5. Yamamoto discloses an imaging device including control of shutter speeds during image capture. Yamamoto discloses that when an image is to be read-out using pixel addition, a shutter speed set for a mode where pixel addition is not used should be divided by the number of pixels which are to be added in the pixel addition mode to ensure that the A/D converted data will not be saturated (Paragraph 0022). Therefore, it would be obvious to set a first shutter speed of  $X/4$  in the 4 pixel mixing mode of Nakano and  $X/3$  in the 3 pixel mixing mode of Nakano where  $X$  is a shutter speed set for a non-addition mode to ensure that the image signals output by the A/D converter will not be saturated.

**[claim 18]**

6. Claim 18 is a method claim corresponding to apparatus claim 14. Therefore, claim 18 is analyzed and rejected as previously discussed with respect to claim 14.

7. Claims 19 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. (US 2004/0046884) in view of Yamamoto (JP 2000-188716) in view of Ito

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(JP 2002-199266 A).

**[claim 19]**

8. Regarding claim 19, Nakano discloses a mode for 2-pixel mixture (Figure 9, Area C; 2-pixel mixing; Paragraphs 0074 and 0077), but does not disclose a further third mode where the pixels are not mixed as claimed. Ito discloses that when a zoom is increased past a point where 2-pixel mixture is performed, the pixels should be read out without mixing, thereby preventing deterioration of the image (Abstract). Therefore, it would be obvious to add a third mode as claimed wherein pixels are readout without mixing so that the magnification ratio could be increased without deteriorating the image. Furthermore, following the teachings of Yamamoto, it would be obvious to set shutter speeds of X/2 for the 2 pixel addition mode and X for the non-addition mode.

**[claim 20]**

9. Claim 20 is a method claim corresponding to apparatus claim 19. Therefore, claim 20 is analyzed and rejected as previously discussed with respect to claim 19.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Henn whose telephone number is (571) 272-7310. The examiner can normally be reached on M-F 11-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Timothy J Henn/  
Primary Examiner, Art Unit 2622